

Select and Add Idea/Innovation/Start-up Details

HI SRINIVAS RAO TAMMIREDDY,

*Title	<div>Title / Name (20 Words Max) *</div> <div>MAGPIE: A DEMONSTRATION OF SYMMETRIC ENCRYPTION</div> <div>Total Number of words: 0 / 20</div>	<div>VIEW PROFILE</div> <div>UPDATE INNOVATION</div>
*Developed as part of	<div>Academic Requirement/Study Project</div>	<div>RESET PASSWORD</div> <div>LOGOUT</div>
*Choose the Financial Year, during the Idea-PoC/Innovation Developed	<div>2023-24</div>	
*Sector / Domain	<div>Theme *</div> <div>Defence & Security</div>	
*Innovation Type	<div>Product</div>	
*Development Stage - Technology Maturity of the Solution/Innovation in terms of Technology Readiness Level TRL (if applicable) (Refer TRL Stages)	<div>TRL 3 : Applied research. First laboratory tests completed; proof of concept</div>	
*Define the problem and its relevance to today's market / society / industry need (Max: 100 Words)	<div>Define the problem and its relevance to today's market / society / industry need *</div> <div>In an era where digital communication is prevalent, securing sensitive information is crucial. Magpie addresses this need by providing a Python-based application that demonstrates essential cryptographic techniques, including encryption and hashing, to secure text messages. This project is relevant as it educates users on fundamental information security principles.</div> <div>Total Number of words: 0 / 100</div>	
*Describe the Solution / Proposed / Developed (Max: 100 Words)	<div>Describe the Solution / Proposed / Developed *</div> <div>The solution utilizes symmetric encryption techniques along with SHA-256 hashing to secure text messages, ensuring both confidentiality and data integrity. The project is unique in its combination of a command-line interface (CLI) and a graphical user interface (GUI), catering to different user preferences and skill levels. Its educational focus, with integrated tutorials and clear</div> <div>Total Number of words: 0 / 100</div>	
*Explain the uniqueness and distinctive features of the (product / process / service) solution (Max: 100 Words)	<div>Explain the uniqueness and distinctive features of the (product / process / service) solution *</div> <div>Our symmetric encryption tool differentiates itself by combining a user-friendly CLI and GUI with robust encryption algorithms, ensuring both ease of use and strong security. Unlike competitors, our solution provides seamless key management, real-time feedback on encryption and decryption processes, and cross-platform compatibility. The integration of Rich for CLI and Tkinter for</div> <div>Total Number of words: 0 / 100</div>	

<p>*How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any (Max: 100 Words)</p>	<div> <p>How your proposed / developed (product / process / service) solution is different from similar kind of prod...</p> <p>The solution incorporates innovative elements like seamless key management and the unique integration of CLI and GUI components, which could be considered for IP protection. However, the underlying cryptographic algorithms, such as those used for symmetric encryption, are typically based on established standards and are not patentable. If the implementation</p> <p>Total Number of words: 0 / 100</p> </div>
<p>*Is there any IP or Patentable Component associated with the Solution?</p>	<div>No</div>
<p>*Has the Solution Received any Innovation Grant/Seefund Support?</p>	<div>No</div>
<p>*Are there any Recognitions (National/International) Obtained by the Solution?</p>	<div>No</div>
<p>*Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?</p>	<div>No</div>
<p>*Had the Solution Received any Pre-Incubation/Incubation Support?</p>	<div>No</div>
<p>Video URL</p>	<div> <p>Video URL</p> <p>https://youtu.be/XKndCmaZxbE</p> </div>
<p>Upload Photograph: : (JPG, PNG, PDF max 2 MB)</p>	<div> <div>Choose file</div> <div>Browse</div> </div>

Update